



Mark G. Raizen

Professor of Physics

The University of Texas at Austin, USA

Title of the lecture:

Short-Time Brownian Motion and Beyond

Format:

TBA

Contents & Summary

In this course, I will review recent developments in the study of short-time Brownian motion, realizing a prediction by Einstein from 1907. I will start with the statement of the problem, experimental realization using optical tweezers and new detection methods. I will then discuss strategies to probe ultra-short times in thermal equilibrium, and conclude with future applications of this work to fundamental physics and real-life challenges.